- Graph $y = 2x + 3$

| $x$ | $y$ |
|-----|-----|
| 0 | 3 |
| 1 | 5 |
| −1 | 1 |

Graph the equation: $y = -3x + 5$
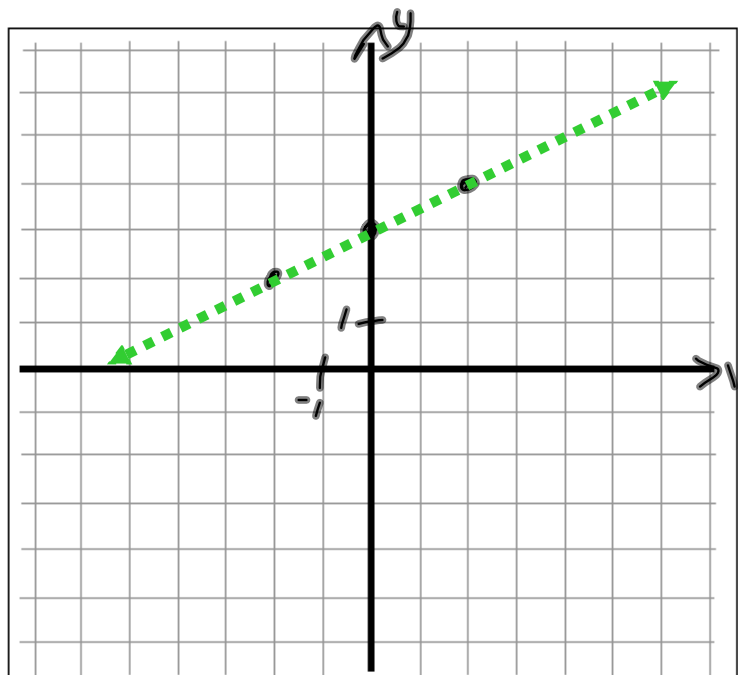
| $x$ | $y$ |
|-----|-----|
| 0 | 5 |
| −1 | 2 |
| 2 | −1 |

Develop a table of values for the equation $y = .5x + 3$ and use your points to draw the graph

$y = \frac{1}{2}x + 3$
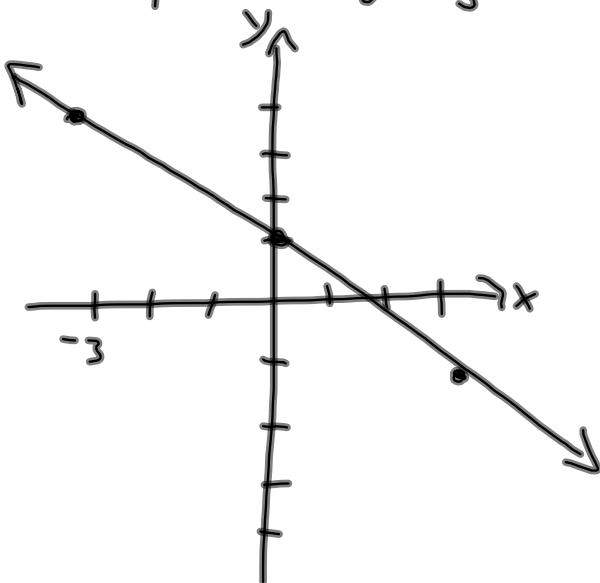
| x | y |
|---|---|
| 0 | 3 |
| -2 | 2 |
| 2 | 4 |

Graph each of the following:

$$y = -\frac{2}{3}x + 1$$

$$y = x^2 - 3 \quad \text{(use 7 points)}$$

| x | y |
|---|---|
| 0 | 1 |
| 3 | -1 |
| -3 | 3 |

$\Rightarrow y = -\frac{2}{3}(0) + 1$

$\Rightarrow y = -\frac{2}{3}(3) + 1$

$\Rightarrow y = -\frac{2}{3}(-3) + 1$

| x | y |
|---|---|
| 3 | 6 |
| 2 | 1 |
| 1 | -2 |
| 0 | -3 |
| -1 | -2 |
| -2 | 1 |
| -3 | 6 |



3
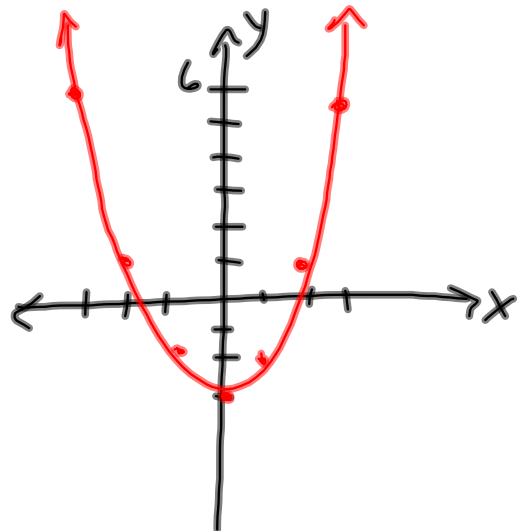
Now try sketching each of the following:

$6x - 3y = 12$

$3x + 4y + 1 = 0$

Isolate for "y ="

$$\frac{4y}{4} = \frac{-3x}{4} - \frac{1}{4}$$

$$\boxed{y = \frac{-3}{4}x - \frac{1}{4}}$$

$$\frac{-3y}{-3} = \frac{-6x}{-3} + \frac{12}{-3}$$

$$y = 2x - 4$$
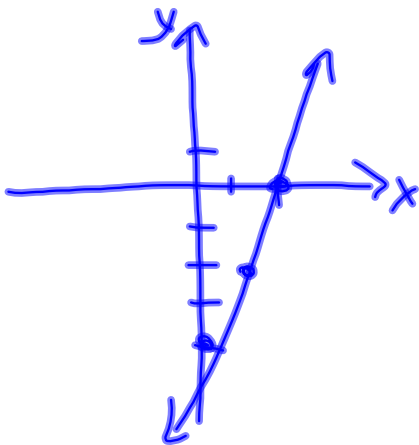
| x | y |
|---|---|
| 0 | -4 |
| 2 | 0 |

| x | y |
|---|---|
| 0 | $-\frac{1}{4}$ |
| 2 | $-\frac{7}{4}$ |

| x | y |
|---|---|
| 1 | -1 |
| 5 | -4 |
| 9 | -7 |





4
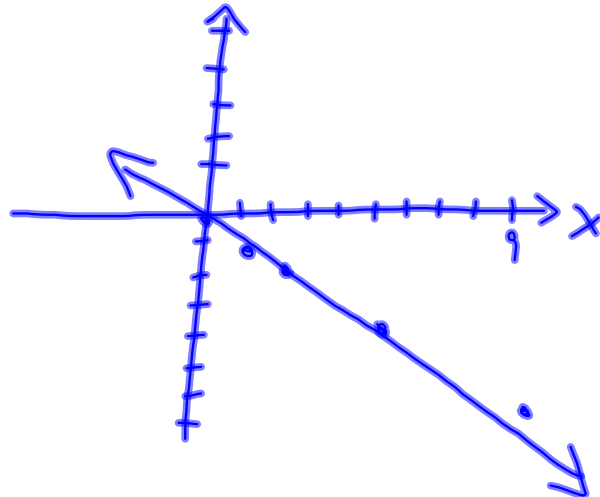
Cost for a banquet: $550 for hall plus $15 per person

a) Write the equation to describe the scenario

b) How much money for 30 people to go?

c) How many people could go for $1300

$C$ – Cost

$n$ – # of people

(a) $C = 15n + 550$

b) $C = 15(30) + 550$

$= \$1000$

(c) $1300 = 15n + 550$

$$\frac{1300 - 550}{15} = \frac{15n}{15}$$

$n = \underline{\underline{50}}$

To rent a cottage: $95 per night for 2 people plus $10 per additional person
a) Write the equation to describe the scenario
b) How much money for 10 people to go?
c) How many people could go for $135

$C \leftarrow$ Cost

$n \rightarrow$ # of people in excess of 2

a) $C = 95 + 10n$

b) $C = 95 + 10(8)$

$C = \$175$

c) $135 = 95 + 10n$

$40 = 10n$

$4 = n$

$\therefore$ 6 people

Text messaging plan:   $10 for 1000 messages plus $0.15 for every message over that

a)   Write the equation to describe the scenario

b)  How much money for 1500 text messages?

c)  How many text messages for a bill of $42.25

$n \to$ # of Messages
beyond 1000

a) $C = 10 + 0.15n$

b) $C = 10 + 0.15(500)$

$C = \$85.00$

(c) $42.25 = 10 + 0.15n$

$$\frac{32.25}{0.15} = \frac{0.15n}{0.15}$$

$n = 215$

1215 Texts

Practice Problems...

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#3, 4, 5, 6, 10, 11, 14, 16, 19,